

Key to diagrams**Figure 1A**

Static delay

5 τ is constant

Original value

Interpolated intermediate value

Figure 1B

10 Dynamic delay

 τ increases**Figure 1C**

Dynamic delay

15 τ decreases**Figure 2**

Enable

Marking

20 Read & write control

Marking

Read control

Polyphase filter

25 **Figure 3**

[please refer to Figure 2]

Figure 430 **Figure 5****Figure 6****Figure 7**

S100

Normal operation

- adjust write pointer
- 5 - adjust read pointer

S101

Lower range limit reached (0 ns)?

Yes No

10

S104

Request additional value

- input value - REG
- do not adjust write pointer
- 15 - adjust read pointer

S102

Over-range?

Yes No

20 (10ns → 0.5ns)

S105

Mark next value

- adjust write pointer
- 25 - adjust read pointer
- mark input value

S103

Use same values

- 30 - adjust write pointer
- do not adjust read pointer
- deactivate slide register of the HBF and the PPF

S106

Normal operation

- adjust write pointer
- adjust read pointer

5 S107

Marking received?

No Yes

S108

10 Additional value received

- adjust write pointer
- adjust read pointer
- REG → second position in the upper branch of the PPF
- change polyphase to 10ns

15

Figure 8

Original value

Intermediate value produced by HBF

20 Original value

Interpolatable intermediate values through polyphase
filter

Range 2

25

Interpolatable intermediate values through polyphase
filter

Range 1